

APPENDIX A

ISSUES FOR CORRECTIVE ACTION AND FOLLOW-UP

Line management is responsible for correcting deficiencies and addressing weaknesses identified by the Office of Oversight reviews. Following each review, line management prepares a corrective action plan. The Office of Oversight follows up on significant issues as part of a multifaceted follow-up program that involves follow-up reviews, site profile updates, and tracking of individual issues.

This appendix summarizes the significant issues identified in this report of the focused review of SRS. The issues identified in Table A-1 will be formally tracked in accordance with the DOE plan developed in response to Defense Nuclear Facilities Safety Board Recommendation 98-1, which addressed follow-up of independent oversight findings. SR and WSRC need to specifically address these issues in the corrective action plan.

During a focused review, the Office of Oversight team may identify isolated weaknesses and/or minor

deficiencies in otherwise effective programs. Although the site needs to correct such weaknesses and deficiencies, the Office of Oversight does not include every identified weakness in the formal tracking system. However, all weaknesses and deficiencies are considered as part of the Office of Oversight follow-up program when evaluating safety management performance and planning future Oversight evaluation and follow-up activities.

Table A-2 provides the status of legacy issues identified during the 1996 Office of Oversight safety management evaluation. The major SRS corrective actions (reported in a memorandum from SRS to the Assistant Secretary of Environmental Management, dated July 1, 1999) are summarized followed by the status of these issues as determined by the Office of Oversight. In cases where a majority of the corrective actions are complete but some deficiencies remain, new issues, of a more restricted scope, were identified.

Table A-1. Issues Identified in Focused Review

IDENTIFIER	ISSUE STATEMENT	REFER TO PAGES
SRS-FR-99-01	The implementation of SR contractor oversight programs is not fully effective and lacks systematic application. Deficiencies were identified in implementation of the technical assessment program, inadequate documentation of management walk-throughs, and inadequate self-assessments of the SR line oversight program.	10
SRS-FR-99-02	The mission date of stabilization activities has been extended past 2006 without re-evaluating the need to upgrade the NMS&S BIOs to DOE Order 5480.23 SARs. Approval of the current NMS&S BIOs was based on the mission ending in 2002.	10-11
SRS-FR-99-03	Multiple deficiencies were identified in the implementation of WSRC hazard analysis processes. Examples include: deficiencies in industrial hygiene/industrial safety training, staffing, involvement in work activities, and procedure reviews; weaknesses in radiological engineering support for the work activities and in pre- and post-job ALARA reviews; and a lack of integration and linkage between various hazard analysis elements (e.g., WCPs, JHAs, PHAs, and safety plans).	16-17

Table A-2. Legacy Issue Status

IDENTIFIER	ISSUE STATEMENT
SRS-01/01/1996-0001-I	<p>SR and WSRC have not allocated the necessary resources to meet a commitment to upgrade the authorization basis for all facilities to DOE Order 5480.23 standards within five years. Additionally, a number of administrative, procedural, and technical problems were evident in the authorization basis and current safety documentation, particularly in the integration of hazard evaluations and the USQD process.</p> <p>SRS reported completion of several actions to address this issue. S/RIDs were revised to require development and maintenance of safety document implementation plans, including target dates and schedules. A Safety Document Integrated Implementation Plan (November 1998) was developed with date and schedule changes controlled through the Annual Operating Plan and Baseline Change Proposal processes. A joint SR–WSRC Authorization Basis Steering Committee was established to review the process and performance of SRS in improving facility authorization bases. The Facility Safety Manual was revised to require that worker safety be analyzed and included in safety documents, and the Integrated Work Process Manual was revised to provide an integrated process for development and maintenance of safety documents. Guidance for consistently implementing the USQD process across the site was developed by the steering committee and included in the Facility Safety Manual.</p> <p>The Oversight evaluation determined that there have been improvements in program requirements and implementation of authorization bases requirements and the USQD process. A consolidated tritium facility SAR to envelop all tritium facilities is planned for issuance in October 1999. A limited sampling of SARs and BIOs at the tritium facilities and F-Canyon indicates that facility-level safety documents adequately describe the facility hazards and are properly maintained. Project and facility work packages are properly screened and evaluated using the USQD process. A limited review of safety analysis documents for the americium-curium project and depleted uranium-plutonium project indicates that worker safety was considered. Oversight will monitor the continued implementation of initiatives to address this issue.</p> <p>Based on a stabilization mission of about 2002, a cost-benefit decision elected not to upgrade the NMS&S BIOs to DOE Order 5480.23 compliant SARs. The approval indicated that a new evaluation should be performed if mission dates were extended. In light of present stabilization mission dates that extend past 2006, an updated evaluation is needed. This is identified as a new issue, SRS-FR-99-02.</p>
SRS-01/01/1996-0002-I	<p>SR and WSRC have not provided the necessary leadership to prevent recurring deficiencies in some facilities and programs. Significant weaknesses in implementation of requirements and work practices were evident in radiation control, waste management, industrial hygiene, work planning, maintenance work control, and conduct of operations (particularly lockout/tagout).</p> <p>SRS reported completion of several actions to address this issue. SR established the Executive Technical Management Board composed of assistant managers and subject matter experts to review projects and operational activities sitewide. The WSRC ISM Executive Steering Committee composed of Vice Presidents performs similar reviews for WSRC. SRS improved the self-assessment and management evaluation procedures to minimize recurrence of deficiencies. Management Policy, MP-5.35, Corrective Action Program, was developed and implemented using a graded approach to direct root cause analysis and corrective action for recurring deficiencies. The assistant manager for Health, Safety, and Technical Support integrated feedback from technical assessment and other evaluations into monthly performance</p>

Table A-2. Legacy Issue Status (Continued)

IDENTIFIER	ISSUE STATEMENT
<p>SRS-01/01/-1996-0002-I (Con't)</p>	<p>meetings. SR initiated a monthly “Conduct of Operations Report” (June 1999) that includes an SR overall analysis, contractor analysis, performance, and trends. SR and WSRC senior management met to discuss and evaluate actions to improve performance. WSRC hazardous energy control and work clearance and authorization procedures were revised to improve the process for controlling work.</p> <p>The Oversight evaluation of F-Canyon, the tritium facilities, and selected projects indicated significant improvement in SR and WSRC leadership, WSRC programs and procedures that control work, and implementation of controls for projects, facilities, and work activities. SR has clearly communicated expectations to WSRC and has accountability mechanisms in place to measure performance. A range of corrective actions from this issue and related issues have greatly improved programmatic processes and accountability to ensure that required controls are correctly implemented at the working level.</p> <p>Notwithstanding the significant program and implementation improvements, some deficiencies were identified in: industrial hygiene/industrial safety training, staffing, involvement of safety professionals in work activities; radiological engineering support for the work activities and in pre- and post-job ALARA reviews; and integration and linkage between various hazard analysis elements (e.g., WCPs, JHAs, PHAs, and safety plans). These weaknesses are identified as a new issue, SRS-FR-99-03.</p> <p>Oversight concludes that there has been substantial progress in the majority of actions to address the more significant SRS work control issues. Remaining actions are of a lesser nature. However, additional action is required to fully address this issue. Therefore, a new issue was identified to track those areas. Oversight will continue to monitor implementation progress.</p>
<p>SRS-01/01/1996-0003-I</p>	<p>SR and WSRC have not effectively used information available from the various deficiency and corrective action tracking systems to develop comprehensive solutions to recurring sitewide deficiencies. Weaknesses exist in identifying and addressing root causes, developing corrective actions to address complex problems, and managing issues.</p> <p>SRS reported completion of several actions to address this issue. An expanded root cause methodology was developed to provide analysis beyond a symptomatic level to the programmatic or system levels. Translation tables between the symptomatic root cause tree and programmatic criteria were updated, and a Problem Analysis Manual that defines the graded approach for root cause analysis was developed and issued. A new policy, MP 5.35, Corrective Action Policy, was developed and implemented. SR and WSRC took action in 1998 to improve the timeliness of occurrence reports resulting in faster root cause identification. The conduct of operations performance indicator is linked to occurrence reports in categories related to disciplined operations. SR review of disciplined operations has been enhanced by including more detailed evaluation by category and facility.</p> <p>The Oversight evaluation found that DOE line organizations have implemented methods for tracking identified deficiencies that vary from computerized databases within F-Canyon to utilization of the contractor Commitment Action Tracking System within the tritium facilities.</p>

Table A-2. Legacy Issue Status (Continued)

IDENTIFIER	ISSUE STATEMENT
SRS-01/01/1996-0003-I (Con't)	<p>Regardless of the method employed, assistant managers were well aware of the current issues affecting their facilities and evaluating corrective actions implemented by the contractor. However, SR has not implemented a process for assessing, tracking, trending, and evaluating sitewide contractor performance and success in resolving identified deficiencies. Oversight confirmed that WSRC has started the implementation of MP 5.35, Corrective Action Policy, together with its supporting document, SCD-9, Problem Analysis Manual. These corrective actions were completed in April 1999, thus, the effective implementation of an adequate program to identify and address root causes was not evaluated. WSRC has implemented effective corrective action tracking systems in the F-Canyon and the tritium facilities, together with several performance indicators to enhance early identification of facility-specific problems.</p> <p>Oversight concludes that there has been progress in addressing elements of this issue, but some actions are recent. Therefore, the effectiveness of all actions and their implementation could not be evaluated. The evaluation identified additional specific SR oversight deficiencies related to, but not necessarily included in, the legacy issue above. Deficiencies were identified in areas such as: performing all required SR assessments, SR self-assessment program, management walkdowns, and tracking and documentation of deficiencies. These deficiencies are identified as a new issue, SRS-FR-99-01.</p>
SRS-01/01/1996-0004-I	<p>SR has not clearly defined a comprehensive process for implementing privatization initiatives at SRS that fully consider applicable ES&H policies and provide for regulation and oversight of worker safety; this has created a vulnerability for the Department.</p> <p>SRS reported that the SR policy statement, "SR Privatization Program," and SR implementing procedure 500, Chapter 580.2, "SR Privatization Program" were issued. The procedure outlines the evaluation method for reviewing potential privatization projects. SR reported that appendices provide in-depth checklists for ES&H areas and that questionnaires query past ES&H performance of potential firms. The D-Area Powerhouse and Three Rivers Landfill are privatized with safety and health oversight being the responsibility of the federal Occupational Safety and Health Administration.</p> <p>The focused Oversight evaluation did not evaluate this issue.</p>
SRS-01/01/1996-0005-I	<p>SR and WSRC have not implemented an effective process for oversight of subcontracted work. WSRC failed to ensure that a subcontractor identified and implemented the proper radiation protection requirements for a large subcontracted project, and both SR and WSRC oversight of the subcontract was limited and inconsistent with the hazardous nature of the project.</p> <p>SRS reported completion of event-specific and generic actions to address this issue. The involved subcontractor issued a lessons-learned document on the incident. The facility characterization plan was revised to include the correct release limit. SRS issued the final event report for the event (SR-WRSC-ERF-1995-0011). The prime contract was revised to require subcontractors to maintain a graded worker protection program acceptable to WSRC and compatible with ISMS. The SRS Workplace Safety and Health Policy was approved, bringing all site workers under a consistent safety and health policy. A joint SR-WSRC team developed "SRS Workplace Safety and Health Implementation Guidelines for Contracted</p>

Table A-2. Legacy Issue Status (Continued)

IDENTIFIER	ISSUE STATEMENT
<p>SRS-01/01/1996-0005-I (Con't)</p>	<p>Services.” The guidance provides contract language and direction concerning the rigor and documentation that should be applied to oversight of subcontractor safety programs.</p> <p>The Oversight evaluation found that, based on limited observation, control of subcontractors has improved. Strengths include prequalification, “all or none” fee incentive awards, verification of subcontractor safety officer qualification, and institution of SRS technical representatives that provide 100 percent safety oversight of all non-low-risk work activities. Subcontract language includes appropriate regulatory and site requirements. Subcontractors are required to prepare safety plans and appropriate hazard analyses. Observations from work conducted at the storm water upgrade project, canyon exhaust upgrade project, and demonstration test facility site preparation project indicated excellent control of construction work with one exception discussed below. Construction sites had appropriate barriers, work was closely supervised, work packages were being used, and superintendents and foremen were knowledgeable of the work and familiar with the core functions and integrated safety management.</p> <p>The Oversight evaluation identified one deficient PHA and a safety barrier deficiency with one subcontractor on the storm water upgrade project at H-Canyon. The PHA was generic rather than job-specific and was not formatted such that the hazards and controls could be easily related back to a specific job step or activity. Site review of the PHA did not identify the deficiency. Observation of work activities for the same job identified the lack of an adequate safety barrier for a 15-foot-deep excavation. Further review indicated that fall protection for deeper excavations was not adequately addressed by the site excavation procedure. The Construction Department immediately corrected the barrier, conducted a safety stand-down for construction superintendents, issued a bulletin, and initiated a procedure change request for the excavation procedure.</p> <p>Oversight concludes that appropriate actions have been taken to address this issue. Continued emphasis on isolated cases of non-compliance is needed to reduce potential for events. Oversight will continue to monitor subcontractor control at SRS.</p>
<p>SRS-01/01/1996-0006-I</p>	<p>More aggressive action and a higher level of attention is warranted by SR and WSRC to address longstanding life safety code violations in the canyon facilities, particularly HB-line. Compensatory actions have not been fully effective in controlling the presence of combustible materials.</p> <p>SRS reported that actions to address this issue are in progress, but are not yet completed. SRS developed a facility fire inspection program in Procedure Manual S-1, Procedure OP 1.2.1. Numerous life safety code physical improvements are ongoing in canyon areas under projects S-4580 and S-4687. Work to add sprinkler systems to F-Canyon and HB-Line under project S-4610 is projected to be complete in April 2000.</p> <p>These improvements were not within the scope of this focused Oversight review. Evaluators noted that work was in progress in F-Canyon to install fire protection lines.</p> <p>Oversight concludes that actions were in progress, but not yet complete to fully address this issue.</p>

Table A-2. Legacy Issue Status (Continued)

IDENTIFIER	ISSUE STATEMENT
SRS- 01/01/1996 0007-I	<p data-bbox="435 369 1386 457">Fragmented requirements and program compartmentalization are hampering an integrated approach by WSRC at Savannah River Technology Center to work activities with ES&H considerations.</p> <p data-bbox="435 495 1430 684">SRS reported that all actions were complete to address this issue. A Conduct of Research and Development Manual was developed and issued. A memorandum of understanding for the Laboratory Technical Operations Area was developed and approved. The memorandum of understanding defines the organizational interfaces and mutual accountabilities between the divisions that perform work within the Laboratory Technical Area. SRS also reported completion of fundamentals training for the full complement of facility operators.</p> <p data-bbox="435 722 1081 747">The focused Oversight evaluation did not evaluate this issue.</p>